

- 1 -

SEQUENCE LISTING

<110> Bayer AG

<120> NOVEL EIMERIA GENE AND PROTEIN, AND THEIR USE

<130> LeA 36695 DE

<160> 24

<170> PatentIn version 3.1

<210> 1

<211> 1186

<212> DNA

<213> Eimeria tenella

<220>

<221> CDS

<222> (83) .. (679)

<223>

<400> 1

caggacccca aaataaaaatc aaaggctatc acactatttt acttcttaac cgtttactgaa 60

ggctacaaga acaagtttga ag atg agg act atc cta gcc acc cta gtc ggt 112
Met Arg Thr Ile Leu Ala Thr Leu Val Gly
1 5 10

ttc aca gcc tgc gca gcc gtt gct gca gac gga gca cct gag tat cct 160
Phe Thr Ala Cys Ala Ala Val Ala Ala Asp Gly Ala Pro Glu Tyr Pro
15 20 25

tct cag ctt gca gtt gaa atc gat cca gaa gcg att att gcg atc cag 208
Ser Gln Leu Ala Val Glu Ile Asp Pro Glu Ala Ile Ile Ala Ile Gln
30 35 40

- 2 -

caa gat gca aac gcc gac cca cgt ctc ttt ttc cca ctg agc ggg ctt Gln Asp Ala Asn Ala Asp Pro Arg Leu Phe Phe Pro Leu Ser Gly Leu 45 50 55	256
gtc tcc gcc aaa ctt gcc aaa gtc ttt caa ccc aac ata tac cca acc Val Ser Ala Lys Leu Ala Lys Val Phe Gln Pro Asn Ile Tyr Pro Thr 60 65 70	304
cct cct agt ccc cag aca act tac cac ttt cac ctc cat cct cat ccc Pro Pro Ser Pro Gln Thr Tyr His Phe His Leu His Pro His Pro 75 80 85 90	352
cat tat ccg cat cct cag cca agt tat cct cat cct caa ccc cat cat His Tyr Pro His Pro Gln Pro Ser Tyr Pro His Pro Gln Pro His His 95 100 105	400
cct cat cct cat ctt ctt cat cct cat ccc cat cat cct cat Pro His Pro His Pro Tyr His Pro His Pro His Pro His His Pro His 110 115 120	448
cct cat ccc cat caa cat cct cat cgt cat ccc gac cat cat ccc cac Pro His Pro His Gln His Pro His Arg His Pro Asp His His Pro His 125 130 135	496
cat cat cct cac cat cat cat gaa cat aat gtt cat gtg cct caa His His Pro His His His His Glu His Asn Val His Val Pro Gln 140 145 150	544
cat cag cac gct caa ccc aac ggc cac cag aac aac ggt ggc cca gct His Gln His Ala Gln His Asn Gly His Gln Asn Asn Gly Gly Pro Ala 155 160 165 170	592
cat tat cac cat gag tac cat ttt gcg cat cct cat caa gag aac cag His Tyr His Asp Tyr His Phe Ala His Pro His Gln Glu Asn Gln 175 180 185	640
cat cac cgc gag gaa gag cag ctt acc gac atc aac taa gctattggtc His His Arg Glu Glu Gln Leu Thr Asp Ile Asn 190 195	689
gggaattaag gtgcttagtc tcagtagtca gtacagtact aggctacgta tgagatcttc atggcaaaga ggtaccagcc accaagctga ctcggctatg ttttattaga caaatttaaa tttaaagggt cccagttca gtctctgcag gtctgcccct gaaagcacga gaggggccta aagggtgatt ggagctgcaa atacagctgc aaatgcagct gcaaagtgcc gcttcaaaaa agggacagggc ttccccccaa aatttttggta tcatacctat caatgcttcg agaaaaacata aaaaacaaaaa gcactgaaga acgttcatag tcggtagtt tagggcatg ccgtgtgcta aaatcccatc gaaccttcag gtacacctga tcgttacgaa gtacacacca ccggtcactc tcaacgcgca ccactagagc gagagctgct tcagggatgc agcgagatgt cgactcagag gtcctacatt aaaggga	749 809 869 929 989 1049 1109 1169 1186

- 3 -

<210> 2

<211> 198

<212> PRT

<213> Eimeria tenella

<400> 2

Met Arg Thr Ile Leu Ala Thr Leu Val Gly Phe Thr Ala Cys Ala Ala
 1 5 10 15

Val Ala Ala Asp Gly Ala Pro Glu Tyr Pro Ser Gln Leu Ala Val Glu
 20 25 30

Ile Asp Pro Glu Ala Ile Ile Ala Ile Gln Gln Asp Ala Asn Ala Asp
 35 40 45

Pro Arg Leu Phe Phe Pro Leu Ser Gly Leu Val Ser Ala Lys Leu Ala
 50 55 60

Lys Val Phe Gln Pro Asn Ile Tyr Pro Thr Pro Pro Ser Pro Gln Thr
 65 70 75 80

Thr Tyr His Phe His Leu His Pro His Pro His Tyr Pro His Pro Gln
 85 90 95

Pro Ser Tyr Pro His Pro Gln Pro His His Pro His Pro His Pro Tyr
 100 105 110

His Pro His Pro His Pro His His Pro His Pro His Pro His Gln His
 115 120 125

Pro His Arg His Pro Asp His His Pro His His His Pro His His His
 130 135 140

His His Glu His Asn Val His Val Pro Gln His Gln His Ala Gln His
 145 150 155 160

Asn Gly His Gln Asn Asn Gly Gly Pro Ala His Tyr His His Asp Tyr
 165 170 175

His Phe Ala His Pro His Gln Glu Asn Gln His His Arg Glu Glu Glu
 180 185 190

Gln Leu Thr Asp Ile Asn
 195

<210> 3

<211> 597

- 4 -

<212> DNA

<213> Eimeria tenella

<400> 3

atgaggacta tcctagccac cctagtcgtt ttcacagcct ggcgcggcgt tgctgcagac	60
ggagcacctg agtataccttc tcagcttgca gttgaaatcg atccagaagc gattattgcg	120
atccagcaag atgcaaaccgc cgaccacgt ctcttttcc cactgagcgg gcttgtctcc	180
gccaaacttg ccaaagtctt tcaacccaac atataccaa cccctccctag tccccagaca	240
acttaccact ttcacctcca tcctcatccc cattatccgc atcctcagcc aagttatcct	300
catcctcaac cccatcatcc tcatacctcat ccttatcatc ctcatcctca tccccatcat	360
cctcatcctc atccccatca acatcctcat cgtcatcccg accatcatcc ccaccatcat	420
cctcaccatc atcatcatga acataatgtt catgtgcctc aacatcagca cgctcaacac	480
aacggccacc agaacaacgg tggcccagct cattatcacc atgactacca ttttgcgcata	540
cctcatcaag agaaccagca tcaccgcgag gaagagcagc ttaccgacat caactaa	597

<210> 4

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-22-up

<400> 4

tcctcatcct tatcatcctc atcct	25
-----------------------------	----

<210> 5

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

- - 5 -

<223> Primer A17-112-lo

<400> 5

gtggggatga tggtcggg

18

<210> 6

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-f-length-64-up

<400> 6

caggacccca aaataaaaatc aaaggctatc aca

33

<210> 7

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-f-length-1176-lo

<400> 7

tgaccggtgg tgtgtacttc gtaac

25

<210> 8

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer ETACTIN-up

<400> 8

ctgtgagaag aaccgggtgc tcttc

25

- 6 -

<210> 9
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer EtACTIN-1o
<400> 9
cgtgcgaaaa tgccggacga agag 24

<210> 10
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-max-90-up
<400> 10 _ tt
tgaggactat cctagccacc cttagtcggtt tc 32

<210> 11
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer A17-max-150-up
<400> 11
gagcacctga gtatccttct cagcttgcag tt 32
<210> 12

- 7 -

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-max-533-lo

<400> 12

tatgttcatg atgatgatgg tgaggatgat gg

32

<210> 13

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-max-631-lo

<400> 13

aggatgcgcga aaatggtagt catggtgata at

32

<210> 14

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer pG8SAET-up

<400> 14

taggtgttagg tattgcacatc gtaactt

27

<210> 15

<211> 27

<212> DNA

- 8 -

<213> Artificial Sequence

<220>

<223> Primer pG8SAET-lo

<400> 15

cgtatatttc ggtcgctgag gcttgca

27

<210> 16

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer pG8SAET-seq-up-140

<400> 16

atgatgactt tacaaataaca tacaggg

27

<210> 17

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-sequint-27-up

<400> 17

cgaggaagag cagcttacccg acatcaacta ag

32

<210> 18

<211> 32

<212> DNA

<213> Artificial Sequence

- 9 -

<220>

<223> Primer A17-sequint-44-up

<400> 18

ccgacatcaa ctaagctatt ggtcgggaat ta

32

<210> 19

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-sequint-385-lo

<400> 19

atgaggataa tttggctgag gatgcggata at

32

<210> 20

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer A17-sequint-351-lo

<400> 20

ggatgaggat ggaggtgaaa gtggtaagtt gt

32

<210> 21

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer M13 reverse

- 10 -

<400> 21
cgagaaaacag ctatgac 17

<210> 22

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer M13 forward

<400> 22
gtaaaaacgac ggccag 16

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer T7 promoter

<400> 23
attatgctga gtgatatccc 20

<210> 24

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer BGH reverse

<400> 24
tagaaggcac agtcgagg 18